

**VEGF-A/VEGF165, Human, Recombinant**

Cat. No. : PCK015

**General Information**

<b>Synonyms</b>	Vascular Endothelial Growth Factor Isoform 165;VEGF165
<b>Species</b>	Human
<b>Expression host</b>	Human Cells
<b>Sequence</b>	Ala27-Arg191
<b>Accession</b>	P15692-4
<b>Mol mass</b>	19.1 kDa
<b>Expiration date</b>	12 months
<b>Bio activity</b>	Measured by its ability to induce calcineurin- NFAT signaling in 293-VEGF Res cells. The ED50 for this effect is 1.0-8.0 ng/mL.

**Product feature**

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin (EU/μg)</b>	< 0.1
<b>Storage</b>	Lyophilized protein should be stored at -5~-20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at -5~-20°C for 3 months.
<b>Shipping</b>	Ice bag
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution of 20 mM Citrate, 8% Sucrose, 4% Mannitol, 0.05% Tween 80, pH 4.0.
<b>Reconstitution</b>	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μg/mL. Dissolve the lyophilized protein in sterile water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Background**

Human Vascular Endothelial Growth Factor (VEGF), also known as VEGF-A and vascular Permeability Factor (VP F), belongs to the platelet-Derived Growth Factor family of cysteine-knot growth factors. It is a potent activator in vasculogenesis and angiogenesis both physiologically and pathologically. VEGF-A has 8 differently spliced isoforms, of which VEGF165 is the most abundant one. VEGF165 is a disulfide-linked homodimer consisting of two glycosylated 165 amino acid polypeptide chains. VEGF stimulates the cellular response through binding to tyrosine kinase Receptors VEGFR1 and VEGFR2 on the cell surface. It is widely accepted that VEGFR2 mediate almost all of the known cellular responses to VEGF while the function of VEGFR1 is less defined and is thought to modulate the VEGFR2 signaling.